PROPOSITION 1 B: GOODS MOVEMENT EMISSION REDUCTION PROGRAM

Proposed Update to Guidelines for Implementation

STAFF REPORT

Board Consideration: March 25, 2010

California Environmental Protection Agency



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DOCUMENT AVAILABILITY

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EXECUTIVE SUMMARY AND RECOMMENDATIONS

The Proposition 1B: Goods Movement Emission Reduction Program (Program) is underway, fulfilling its mandates to reduce diesel emissions and health risk in heavily impacted communities and help attain federal air quality standards. The first Program funds are putting over 5,000 cleaner trucks on the road in California by the end of this year (including over 600 natural gas trucks), followed by ship and locomotive projects that will be operational in 2011. These projects will reduce over 2.3 million pounds of fine particles (PM2.5) and 40 million pounds of nitrogen oxides (NOx) over their lifetime.

This Staff Report discusses the proposed update to the Program Guidelines. These Guidelines define the procedures for the Air Resources Board (ARB or Board) and local agencies to administer the Program, as well as the specifications for eligible projects.

ARB staff worked extensively with local agencies, affected industries, and impacted community representatives to identify improvements to the Program to increase its effectiveness. The proposed updates are critical to: reflect current State fiscal policy for bond programs, expand the project choices, increase access for truckers to grants and supplemental financing, align and simplify truck incentive programs, and reduce paperwork.

Key Changes Proposed

- Higher funding for the clean est technology
- New hybrid/electric equipment projects
- Lower cost options for all trucks and subsidized loans for fleets of 1-20
- Expanded truck e ligibility
- \$100M reserve for existing drayage trucks
- \$475M for other trucks
- \$160M for ships at berth/car go equipment

One of the core Program requirements is that the funded projects must achieve emission reductions "not otherwise required by law or regulation." The staff proposal increases the options and funding for hybrid, electric, or zero-emission equipment that goes beyond the requirements to reduce PM and NOx emissions, as well as fuel use and greenhouse gases. Other project options include a greater share of Program funding for early introduction of cleaner technology to create customer demand and spur manufacturers to make that technology sooner. For trucks, the proposal includes lower cost technology, paired with Proposition 1B-subsidized loan programs to help owners obtain financing. State agencies, including ARB, could receive Program funds to administer truck loans or loan guarantees.

ARB staff is recommending that the Board revise the statewide category funding targets, without any changes to the regional funding targets. The proposal would establish a reserve to upgrade existing drayage trucks and re-allocate the remaining drayage truck funds to other trucks and to ships at dock/cargo equipment projects. The updates would also revise the priorities for new allocations of funds to focus on projects for trucks (including loan programs), locomotives, and ships at berth.

ARB staff recommends that the Board adopt the proposed update to the Guidelines and seek approval to move ahead with funding awards for up to \$500 million in June, contingent on the availability of bond funds. ARB is receiving roughly \$180 million of these new funds from the recent March bond sales. Taking these steps now will leave ARB and the local agencies poised to act quickly as bond monies arrive.

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I. EXISTING PROGRAM

A. **Program Basics**

1. How do freight operations impact air quality and public health?

The diesel engines used in trucks, locomotives, ships, harbor craft, and cargo equipment to move goods in California are major contributors to the State's biggest pollution challenges. These sources account for more than two-thirds of the toxic diesel particulate matter (PM) statewide. They also produce about one-third of the NOx and sulfur oxides that form regional ozone or PM2.5, especially in the South Coast and San Joaquin Valley.

California residents face serious health impacts from freight-related diesel pollution, especially in neighborhoods near ports, rail yards, roads with high truck traffic, and distribution centers. Freight-related emissions are a public health concern at both the community and regional levels because they contribute to serious health effects, such as cardiac and respiratory diseases, increased asthma and bronchitis episodes, increased risk of cancer, and premature death.

ARB has implemented a comprehensive program to characterize and reduce the impacts of air pollution from freight operations on nearby communities. Building on health risk assessments for major port and rail yard facilities, ARB has adopted plans, regulations, incentive programs, and other strategies to cut emissions from freight sources. Major ports and railroads are implementing additional measures to reduce the localized health risk near their facilities.

2. What is the Goods Movement Emission Reduction Program?

Proposition 1B, approved by voters in 2006, authorized \$1 billion in bond funding to ARB to cut freight emissions in four priority trade corridors. These corridors are: the Los Angeles/Inland Empire, the Central Valley, the Bay Area, and the San Diego/Border area. Health and Safety Code section 39625 et seq. (shown in Appendix A) establishes the Goods Movement Emission Reduction Program and directs ARB to maximize the emission reduction benefits while achieving the earliest possible health risk reduction in communities heavily impacted by goods movement. Governor Schwarzenegger's Executive Order S-02-07 provides further direction to ensure accountability and transparency in administering bond-funded programs.

The Program provides financial incentives to owners of equipment used in freight movement to upgrade to cleaner technologies that reduce PM and NOx emissions, as well as greenhouse gases in some cases. The major sources eligible for bond funding include heavy-duty diesel trucks, freight locomotives, cargo ships at berth, commercial harbor craft, cargo handling equipment, and infrastructure for electrification of truck stops, distribution centers, and other places trucks congregate.

3. How does the Program work?

ARB awards funding to local agencies (like air districts and ports). Those agencies then use a competitive process based on emission reductions and cost-effectiveness to provide incentives to equipment owners to upgrade to cleaner technology.

The Program supplements ARB's diesel regulations by funding early compliance or providing extra emission reductions beyond those required by applicable rules or enforceable agreements. The Proposition 1B ballot initiative specifically directs that ARB use the funds to achieve emission reductions "not otherwise required by law or regulation."

Reductions Must be Early or Extra

Key existing ARB rules/requirements:

- · Port and rail yard truck rule
- Statewide truck and bus rule
- · Truck idling and refrigeration unit rules
- · Ship fuel and at-berth rules
- · Harbor craft rule
- · Cargo equipment rule
- · Locomotive/rail yard agreements

4. What are the Program Guidelines?

As required by State law, the Board adopted the initial Program Guidelines in February 2008. The Guidelines define the responsibilities of ARB, local agencies, and equipment owners, as well as the technical specifications and funding amounts for eligible projects. The Board approved some modifications to the Guidelines in May 2009 and delegated authority to the ARB Executive Officer to make additional modifications. Appendix B summarizes the changes made via Executive Order between February 2008 and March 2010.

5. How is the Program funded with bond monies?

The State budgets for Fiscal Years (FY) 2007-08, 2008-09, and 2009-10 have appropriated a total of \$750 million to ARB for the Program. The Governor's proposed budget for FY2010-11 includes the final \$230 million for the Program.

The process for ARB to access the cash has changed since the Board adopted the initial Program Guidelines. At that time, the State routinely provided the cash for bond programs via a loan at the request of the administering agency. Future bond sales then reimbursed the State for the amount of the loan. ARB requested such a loan in Fall 2008 to begin implementing this Program. That loan request remains on hold because the State stopped issuing new loans in advance of bond sales due to fiscal and cash flow issues.

Now, the State sells the bonds first and distributes the "upfront proceeds" to agencies for specific bond-funded projects. The type of bonds sold affects how the proceeds can be used. For example, the federally-subsidized Build America Bonds can be used for direct project costs, but not for administrative expenses. Once proceeds are transferred into ARB's Program account, the State Treasurer's Office issues a tax compliance certificate for ARB signature and approves the signed certificate. ARB then has the authority to spend those monies.

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ARB provides input on the Program's cash needs, but staff cannot predict the schedule for future bond sales or the availability of upfront proceeds for this purpose. Certainty comes only when we are notified that ARB will receive a specified dollar amount following a successful bond sale.

6. What are the match funding requirements?

Consistent with clear directives in the implementing legislation, the Program uses State bond funding to leverage other monies to achieve the greatest emission reductions per State dollar. By limiting the amount of Program funds available for each project, we maximize the number of individuals, businesses, and ports able to access those funds, as well as the resulting air quality benefits.

While the Guidelines cap the maximum amount of bond funding for each project type, they do not require a fixed match ratio and they do not specify who must pay the remainder of the project cost. The local agencies implementing the Program are not required to contribute any of their own monies. To provide flexibility, projects can be co-funded through a combination of private, federal, other State, and/or local sources.

B. <u>Program Implementation</u>

7. What is the status of projects awarded FY2007-08 funds?

In February and May 2008, the Board awarded the first \$250 million in FY2007-08 funds to local agencies. In June 2008, the local agencies signed grant agreements with ARB and moved quickly to implement them. Appendix C includes a December 2009 Status Report to the Department of Finance (DOF) that provides an update on each grant.

In December 2008, DOF issued a statewide directive to stop work on bond-funded programs due to the State's fiscal crisis and inability to access bond markets. ARB then advised local agencies with existing grants to suspend entering into new contracts with equipment owners or expending funds under existing contracts until further notice. The DOF stop work order remains in effect today unless an agency receives upfront proceeds from a bond sale and authorization to use those funds for specific projects.

ARB received upfront proceeds of \$111 million from Spring 2009 bond sales and \$139 million from Fall 2009 sales. Once ARB had the cash on deposit and the authorization to spend it, we notified local agencies in June 2009 and February 2010 to restart the suspended grants. Most of this cash is from the sale of Build America Bonds that can fund direct project costs for equipment, but not administration costs. As a result, ARB has been able to make available to local agencies only the initial administration funds, which are typically half of the total. This created a hardship for local air districts. However, with new proceeds from the March 2010 bond sale, we will soon have funding to cover the rest of the local agency and ARB administrative costs.

8. What are the results from projects awarded FY2007-08 funds?

The local agencies expect to have over 2,400 old trucks scrapped and 3,000 new and retrofitted trucks operational in the first half of 2010, with another 2,100 new and retrofitted trucks ready by the end of 2010. We estimate that these truck upgrades, together with locomotive and shore power projects, will reduce over 2.3 million pounds of PM and 40 million pounds of NOx over their lifetime.

II. PROPOSED CHANGES TO THE PROGRAM

A. Development and Schedule

9. What outreach has ARB staff done to develop this proposed update?

Starting in Fall 2008, we solicited input from local air districts, ports, the trucking industry, railroads, shippers, banks and financing companies, equipment manufacturers, and environmental representatives. Based on this input, ARB staff released a Draft Concept Paper and held five public workshops in the trade corridors in November 2008.

We continued to meet with stakeholders throughout 2009 and early 2010 to develop ideas for changes to the Program Guidelines. These events included: several meetings of the Incentives Advisory Committee chaired by Board Member Berg, an executive work session with the California Air Pollution Control Officers Association, meetings of the Truck Rule Advisory Committee, discussions with drayage and non-drayage trucking groups and associations, meetings with ports/shipping interests and railroads, regular meetings with local agencies currently implementing Program grants, and conference calls with environmental and community advocates.

ARB staff released a second draft Concept Paper in February 2010, then held another five workshops in the trade corridors in early March 2010. We have also received written comments from stakeholders. The proposed update to the Guidelines incorporates many of the suggestions we've heard over the last year and a half.

10. What is the tentative schedule for the next funding awards?

The tentative schedule for ARB and local agency actions to implement the Program for \$500 million in combined FY2008-09 and FY2009-10 funds is shown below.

Late March 2010	Notice of Funding Availability. Once the Board acts on the updated
	Program Guidelines, ARB staff will issue a Notice of Funding
	Availability and solicit local agency project proposals.

Late April 2010 <u>Local agency project applications</u>. Local agencies will submit proposals (by funding category) to ARB to implement incentives for eligible projects.

May through June 2010

<u>Public review and ARB staff evaluation of proposals</u>. ARB will review and post eligible applications on the Program website. ARB staff will evaluate eligible applications based on criteria in the Guidelines, recommend projects for funding, and hold public workshops.

June 2010

Local agency project awards. The Board will hold a public hearing to consider the recommended funding awards for specific primary and backup local agency projects (and any State agency loan or loan guarantee program). Any awards must be consistent with State fiscal policy and contingent on the availability of bond funding.

The following steps will occur following receipt of new bond monies.

July 2010 and later

Agreements with local and State agencies. As bond funds become available, ARB staff will execute grants with the local agencies (and interagency agreements with State agencies for loan or loan guarantee programs), based on the list of primary and backup projects approved by the Board. The execution of the grant agreements starts the statutory time clocks for local agencies to get funds under contract and to liquidate those funds.

<u>Equipment owner applications and awards</u>. Local agencies will solicit and evaluate applications for equipment projects, work with ARB to develop a competitively ranked list according to the Guidelines, and select eligible projects. Local agencies will then execute contracts with equipment owners to fund projects.

<u>Installation of cleaner technology</u>. As project contracts are executed, equipment owners will begin purchasing and installing cleaner equipment.

11. What priorities does ARB staff recommend for the next funding awards?

We suggest that the Board consider identifying these priorities for award of \$500 million in FY2008-09 and FY2009-10 funds:

- Truck upgrade projects to quickly reduce the health risk in communities near high truck-traffic freeways, warehouse/distribution centers, ports, and rail yards. These projects also provide significant reductions to help meet federal air quality standards for PM2.5 and ozone. To support cost-effective early compliance with ARB's truck rules, the truck funds need to be front-loaded.
- Locomotive projects to cut the elevated, excess cancer risks in neighborhoods near rail yards, as identified in ARB's health risk assessments. The California State Implementation Plan relies on incentives and other mechanisms to accelerate the use of cleaner locomotives to attain federal air quality standards in the South Coast and San Joaquin Valley.

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 Ships at berth projects to further reduce diesel pollution in port-side communities, and cut greenhouse gas emissions. To comply with the January 2014 requirements of ARB's rule, multi-year projects to install electric infrastructure to provide shorebased power to ships at berth must start soon. With incentives, some of these installations may be able to begin operation early and to achieve extra reductions each year through greater use.

12. How would the proposal modify the category funding targets?

In February 2008, the Board approved funding targets – by category and trade corridor (region) – to create an overall vision for the \$1 billion Program and to ensure that the statutory criteria are effectively implemented. Staff recommends that the Board modify the category targets as shown below, with no change to the regional targets for each corridor. The proposed modification would combine the two categories of truck projects into a single category with \$700 million in total funding, and reallocate \$60 million in former drayage truck funds to ships at berth/cargo equipment projects.

Table 1. Recommended Changes to the Category Funding Targets

Funding	Source Category or Categories
\$700 million	Heavy duty diesel trucks that haul goods, plus any truck stop or distribution center electrification
\$400 million	Heavy duty diesel trucks serving seaports and intermodal rail yards
\$360 million	Other heavy duty diesel trucks that haul goods, plus any truck stop or distribution center electrification
\$100 million	Freight locomotives
\$160 million \$100 million	Cargo ships at berth, plus cargo handling equipment
\$ 40 million	Commercial harbor craft

Staff recommends that local agencies administer the truck funds as a single category and run a solicitation for all types of eligible trucks. However, we believe it is important to ensure that owners of existing drayage trucks who installed PM retrofits to meet the 2010 compliance deadline have access to additional funding to replace those trucks ahead of the 2014 compliance deadline in the Drayage Rule. We suggest that the Board make the recommended change to the truck funding targets, but direct ARB staff to manage the funds to reserve \$100 million of the combined truck funds to assist these drayage operators. (Please see Question 14 for more discussion of this approach.)

ARB staff is not recommending any changes to the trade corridor funding targets previously approved by the Board.

Table 2. Approved Trade Corridor Funding Targets

Funding*	Percentage	Trade Corridor
\$550 million	55%	Los Angeles/Inland Empire
\$250 million	25%	Central Valley
\$140 million	14%	Bay Area
\$ 60 million	6%	San Diego/Border

^{*} Includes State and local administrative funding.

B. <u>Equipment Project Specifications</u>

The specifications for eligible projects are an integral part of the Program Guidelines. For each equipment project option, these specifications define the eligibility criteria, technology and emission standards, project funding caps, project lifetime, and operational and reporting requirements. The Board directed ARB staff to evaluate advances in technology, changes in equipment costs, regulatory actions, demand for Program funds in the prior funding cycle, and other new information that influences the design of project specifications after each appropriation of new funds.

The proposed update to the Guidelines would revise existing project options and add new options to take advantage of cleaner technology that is currently available or expected to be available. The new options add hybrid, electric, and zero-emission technology projects that go beyond existing requirements to provide extra emission reductions. They also include combined PM plus NOx retrofits that we expect will provide a lower cost alternative for truck owners to comply with ARB rules. The updates reflect changes in equipment costs and shorter project lives where regulations will require the technology to be maintained longer-term for compliance purposes.

Local agencies choose which source and funding categories they wish to apply to administer. Under the staff proposal, these agencies would need to solicit, evaluate, rank, and fund applications for all eligible equipment project options in that source and funding category, with selection of projects determined by the competitive process.

13. What is the basis for the truck project options?

Trucks are subject to ARB's Drayage Truck Rule and the Statewide Truck and Bus Rule, which define the schedule to upgrade existing trucks to cleaner models. These rules focus on near-term retrofits of PM filters on existing trucks, and longer-term upgrade of those trucks to Model Year (MY) 2007 or MY2010 emission standards. Both MY2007 and MY2010 standards require effective, built-in PM controls. Trucks meeting MY2010 standards reduce NOx emissions by over 80 percent compared to MY2007 standards. The Program Guidelines specifically define the allowable "MY2007 emissions" and "MY2010 emissions" for truck engines, based on the ARB Executive Order certifying the engine.

The staff proposal retains the retrofit, repower, replacement, and three-way transaction project options offered in the first year of the Program, with increased funding for replacement trucks that meet MY2010 emissions. It also adds lower-cost options for truck owners to achieve MY2007 emissions through replacements with used trucks or use of combined PM plus NOx retrofit devices.

The first phase requirement in the Drayage Truck Rule for 85 percent PM control is already in effect for most trucks. The opportunity for early emission reductions is primarily limited to reducing NOx by replacing an older truck that has a PM filter with a newer truck, in advance of the second phase requirement to do so by 2014. There is also the potential to achieve extra PM and NOx emission reductions by going to a MY2010 diesel or natural gas, hybrid, or fully-electric truck.

Since the benefits of new incentives can no longer include the required 85 percent PM control, the emission reductions that determine cost-effectiveness for drayage trucks will be lower than for non-drayage trucks. In response, ARB staff is proposing to retain the options to replace a drayage truck with a MY2003 or older engine, but at a reduced funding level (\$10,000 lower than for non-drayage trucks). Drayage trucks with MY2004-2006 engines would be eligible for a PM plus NOx retrofit, at the same funding level as non-drayage trucks.

A local agency evaluates applications from truck owners for all of the project options and scores each application based on the established criteria of emission reductions and cost-effectiveness to determine which trucks receive funding. Each truck competes independently, so there is no advantage or disadvantage based on fleet size.

Table 3. Proposed Equipment Project Options for Trucks

Eligible Equipment and Upgrade		· · · · · · · · · · · · · · · · · · ·			Project Life	
		Non- Drayage	Drayage	Period	-	
Α	Replace truck with MY2003 or older engine with truck meeting MY2010 emissions ²	\$60,000	\$50,000	2-3 yrs	5 yrs or 500,000 mi (whichever	
В	Replace truck with MY2003 or older engine with truck meeting MY2007 emissions ³ (less than 500,000 mi)	\$40,000	\$30,000	2-3 yrs	comes first)	
С	Repower truck with MY1994-2006 engine with new engine that meets MY2010 emissions ²	\$30,000	N/A ⁴	2-3 yrs		
О	Retrofit truck with MY2004-2006 engine with PM plus NOx retrofit device to meet MY2007 emissions ³ or lower	\$20,000	\$20,000	2-3 yrs		
Е	Retrofit truck with MY1994-2006 engine with PM filter	\$10,000 \$5,000	N/A ⁴ N/A ⁴	1 yr 6 mos	4 yrs 2 yrs	
F	Three-way truck transaction: (1) replace <i>middle-aged</i> truck with MY1998-2006 engine with <i>new</i> truck meeting MY2010 emissions ² ;	\$60,000	N/A ⁴	2-3 yrs	New truck 5 yrs	
	 (2) retrofit <i>middle-aged</i> truck with PM filter; (3) replace <i>old</i> truck with MY1993 or older engine with retrofit <i>middle-aged</i> truck and scrap <i>old</i> truck 	\$5,000	N/A ⁴		<u>Middle-aged truck</u> 4 yrs	
G	Electrification infrastructure for a truck stop or distribution center to reduce diesel engine use	Lower of 50% funding level effectiveness	that provide	s a cost-	10 yrs	

¹ If the local agency offers 90 percent California operation for truck replacement projects, the funding cap is \$10,000 less than the figures shown.

MY2010 emissions means an engine certified (CERT and FEL) to 0.20 grams per brake-horsepower hour (g/bhp-hr) NOx or less, and 0.01 g/bhp-hr PM or less, on the most recent ARB Executive Order.

³ MY2007 emissions means an engine certified (CERT and FEL) to 1.20 g/bhp-hr NOx or less, and 0.01 g/bhp-hr PM or less, on the most recent ARB Executive Order.

⁴ These options are not viable for drayage trucks because of the applicable compliance dates.

14. What is ARB staff proposing for existing drayage trucks?

Owners of drayage trucks had to act earlier than other truck owners to quickly reduce diesel PM and protect impacted communities around ports and rail yards. Many drayage truck owners replaced their old vehicles with ones meeting the MY2007 standard, which means those trucks already comply with the second phase requirement. Owners of a few thousand drayage trucks chose the lower cost option and retrofitted their trucks with PM filters. Most of the retrofit trucks are in the hands of independent owner-operators and small fleets that will seek assistance to replace these trucks ahead of the second phase requirement in 2014.

ARB staff proposes to manage the truck funds to reserve up to \$100 million to replace existing drayage trucks equipped with PM retrofits and registered in ARB's Drayage Truck Registry as of June 2010. We believe \$100 million would be sufficient to cover this group of less than 3,000 trucks, assuming an average grant of \$35,000 per truck. Any of these funds not used for drayage trucks would automatically be available for non-drayage trucks.

We would tentatively allocate the \$100 million based on the number of retrofit trucks in the Registry in each region as of June 30, 2010. Local agencies would receive and administer grants for all trucks combined, but the drayage trucks that meet the above criteria would be ranked separately from other trucks and able to compete for the reserved funding.

15. How would possible changes to the Statewide Truck and Bus Rule affect the Program Guidelines?

The Board will consider amendments to the Statewide Truck and Bus Rule this summer to reflect changes in emissions due to the recession and to reduce the economic impact on the trucking industry. Those amendments may extend the best available control technology schedule, which would create a longer window of opportunity to use incentive funds for early compliance. After Board consideration of the Rule, ARB staff will post a table on the Program website that details the dates by which truck upgrades would need to be operational and when those trucks would be eligible for inclusion in any fleet averaging provisions under the Rule.

16. How would the proposal increase access to grant funding for truck fleets, including agricultural and construction trucks?

ARB staff is proposing a number of changes to make more trucks eligible for grant funding and to align with other State-funded truck incentive programs.

 Allow two-axle trucks that pull heavier loads with the same engines used in larger trucks to compete for funding by adding a minimum weight rating of 60,001 pounds declared gross vehicle weight (GVW) or declared combined gross vehicle weight (CGW) requirement on the registration form at time of application. Trucks

would also need to have a manufacturer's gross vehicle weight rating (GVWR) of 31,000 pounds or greater listed on the application and verified at pre-inspection.

- Provide a "2 for 1" option that allows a truck owner to replace two old, lower mileage trucks with a single cleaner truck, which will increase the cost-effectiveness and competitiveness of the application for funding.
- Consistent with how trucks are regulated under ARB's rules, base the eligibility on the model year of the truck *engine*, rather than the truck *chassis*.
- Provide an alternative means to demonstrate two years of prior California operation and registration for trucks with monthly or seasonal registration (often used by independent owner-operators and agricultural fleets).
- Allow a truck owner the option to rely on a default annual mileage level, determined by ARB based on the age and type of truck, instead of documenting annual miles traveled as part of the application. Many old trucks no longer have working odometers, making proof of annual miles a difficult condition for their owners to meet. This is especially true for independents and small fleets that may not have the same level of recordkeeping as larger fleets. This option would also reduce the workload on the local agencies that now spend considerable time seeking reliable mileage documentation.
- For certain types of trucks (including concrete mixers and dump trucks), provide a
 mechanism to account for the emissions from engine operations that don't involve
 travel. Owners of these trucks could report the Power Take Off (PTO) hours to
 supplement the annual miles traveled that are used to calculate the potential
 emission reductions.

17. How would the proposal improve access to supplemental financing for smaller truck fleets?

Obtaining financing for the privately funded portion of truck projects has proven to be a barrier for independent owner-operators and smaller trucking fleets that have less access to capital. The updates would increase access to financing for fleets of 20 trucks or fewer by encouraging the combined use of a Program grant and a State-subsidized loan or loan guarantee.

Lease-to-own programs also provide a viable option for lower-income truck owners to take possession of a new truck with a minimal down payment and a more affordable monthly payment. The proposed update would allow applicants to transfer their applications into an approved new or existing lease-to-own program after the solicitation period has closed.

18. How can middle-aged trucks be reused (rather than scrapped) to benefit air quality?

The update would expand the reuse options for middle-aged trucks that would otherwise be scrapped as part of a truck replacement project. The Program currently allows for a three-way transaction where a new truck replaces a middle-aged truck. In turn, the middle-aged truck is retrofit with a PM filter and replaces an old truck that is ultimately scrapped. We are proposing to extend the model year eligibility for the old and middle-aged trucks funded under the Program to increase the pool of potential participants.

Staff proposes that the Board delegate authority to the Executive Officer to approve additional truck reuse options. Reuse proposals would need to: deliver an equivalent or greater air quality benefit in California (compared to scrappage of the middle-aged truck), be consistent with the principles and goals of this Program, and not substantially increase the Program administration workload. Any truck reused in California would need to be retrofit with a PM filter to ensure a localized health benefit. We discuss potential examples for reuse below.

- Trucks turned in under the Program could be retrofit with PM filters and used to replace older trucks in low use fleets, agricultural fleets, or NOx-exempt areas within California. The old truck would be scrapped. We are exploring the possibility of using other funding sources, including the Carl Moyer Program, to co-fund the cost of the retrofit device.
- A government agency (such as the federal government or another state air agency)
 could request that middle-aged trucks be available for temporary reuse outside of
 California, with safeguards to ensure that the trucks cannot operate in California.
 These trucks could be shipped overseas for disaster relief efforts, or they could be
 retrofit and used to replace even older trucks in out-of-state communities highly
 impacted by diesel PM.

The Puget Sound Clean Air Agency has asked ARB to make trucks available for reuse at Northwest ports to replace much older trucks. The Puget Sound Agency would ensure that reused trucks are retrofit with PM filters and fuel efficiency upgrades, prohibited from operating in California, and scrapped within a defined time period. Under the Puget Sound proposal, ARB could also receive minimal compensation for each truck, providing additional funding for truck incentives in California.

 An educational institution could request a few trucks for use in vocational training for retrofit installers. Trucks would be registered as non-operational and scrapped after a specified period.

19. How would the proposal allow limited truck operation outside of California?

Currently, the Program requires 100 percent California operation for the new or upgraded equipment. For trucks, this approach provides the greatest certainty of substantial truck operations within the four trade corridors as required by the implementing statute. However, trucking firms, ports, and local air districts continue to request some flexibility on this provision to accommodate California-based fleets that make short trips to warehouse and distribution center operations just across the border into Nevada, Arizona, and Mexico. We also hear from some independent owner-operators and small fleets that they cannot afford to take advantage of grants unless they can retain the ability to take jobs that require occasional out-of-state trips.

The proposal would allow local agencies to offer an option for 90 percent California operation, at a reduced funding level. This option would be available for replacement trucks equipped with an electronic monitoring system (i.e., Global Positioning System) that can reliably record and report miles traveled within and outside California to the local agency for the project life. The truck owner would be responsible for:

(1) purchasing a monitoring unit with a warranty period that equals or exceeds the project life, (2) maintaining a monthly service contract on the unit for the project life, and (3) transmitting periodic electronic reports to the local agency, as specified by ARB staff. No Program funds could be used for these additional expenses.

20. How would the proposal expand the options for truck owners who cannot complete their contracts?

The Program Guidelines currently allow the owner of Program-funded equipment to sell it to a new owner who assumes the contract obligations for the remainder of the term. The proposed changes would add new options for the truck owner to:

- Buy out the contract for an operable truck at a prorated grant amount, plus a \$5,000 buy-out fee.
- Replace a destroyed, inoperable, or stolen truck with an equivalent model (at the owner's expense) to serve out the remainder of the contract term.
- Opt to not replace a destroyed, inoperable, or stolen truck, but pay back a prorated grant amount, or the insured value of the truck, whichever is less.

21. What is the basis for the locomotive project options?

The existing and new project types would help implement the priority options in the *Recommendations to Provide Further Locomotive and Railyard Emission Reductions* report that the Board approved in September 2009, as well as the Board's February 2010 direction to further reduce emissions and health risks at selected railyards.

The proposed changes to the project options include upgrades for medium-horsepower helper and hauler locomotives that operate regionally, plus a greater share of Program funding for early introduction of locomotive technology meeting the U.S. Environmental

Protection Agency's (U.S. EPA) most stringent Tier 4 emission standards that require highly effective PM and NOx control.

Staff also recommends a new option for a hood or bonnet type system to capture and control emissions generated by locomotives during maintenance and diagnostic operations at rail yards. The applicant would need to request a level of Program funding for this system that achieves a cost-effectiveness equal to or better than the *least* cost-effective locomotive upgrade project (a switcher locomotive using 20,000 gallons of fuel per year). This provision is designed to ensure that locomotive funds achieve the greatest reduction in emissions and localized health risk per State dollar invested, regardless of which project option is funded.

Table 4. Proposed Equipment Project Options for Locomotives and Rail Yards

E	Eligible Equipment	Upgrade	Maximum Program Funding	Project Life
A	Switcher locomotive (1,006 hp-2,300 hp) Uncontrolled, Tier 0 or Tier 1 diesel freight locomotive	Replace, repower or rebuild with a new generator-set, hybrid, or alternative technology to meet emission limit of: 3.5 g/bhp-hr NOx or less, 0.10 g/bhp-hr PM or less	 (a) Lower of 50% of eligible cost or \$750k to meet emission limit of: 3.5 g/bhp-hr NOx or less, 0.10 g/bhp-hr PM or less (b) \$1M to meet Tier 4 standard for NOx only or PM only (c) \$1.2M to meet Tier 4 standards for both NOx and PM 	15 yrs
В	Medium horsepower line-haul locomotive (2,301 hp-4,000 hp) Uncontrolled, Tier 0 or Tier 1 diesel freight locomotive	Replace, repower or rebuild with a new engine, or install alternative technology to meet emission limit of: 4.0 g/bhp-hr NOx or less, 0.10 g/bhp-hr PM or less	 (a) Lower of 50% of eligible cost or \$750k to meet emission limit of: 4.0 g/bhp-hr NOx or less, 0.10 g/bhp-hr PM or less (b) \$1M to meet Tier 4 standards for NOx only or PM only (c) \$1.5M to meet Tier 4 standards for NOx and PM 	15 yrs
С	Line-haul locomotive (4,001 hp or higher) Uncontrolled, Tier 0 or Tier 1 diesel freight locomotive	Replace or rebuild to meet Tier 3 standards or lower emissions	 (a) Lower of 50% of eligible cost or \$1.2M to meet Tier 3 standards through use of Tier 3 engine or Tier 2 engine with certified "Tier 2 Plus" kit (b) \$1.5M to meet Tier 4 standards for NOx only or PM only (c) \$2M to meet Tier 4 standards for NOx and PM 	15 yrs
D	Existing freight rail yard	Install infrastructure for a locomotive emissions capture and control system (a.k.a. hood or bonnet) that achieves a minimum control effectiveness of 85% for NOx and 85% for PM		10 yrs

22. What is the basis for the ships at berth project options?

Under ARB's Ships at Berth Rule, operators of specified types of cargo ships must reduce emissions from the ship's auxiliary engines while docked, with the majority of the control requirements starting in 2014. We've proposed changes to the specifications for shore-based electrical power projects, whether that power is supplied by the electrical grid or generated on-site. The updates also add a new project option for a hood or bonnet technology to capture and control the emissions from a ship's auxiliary engines and boilers by 85 percent.

The proposed update to the Guidelines reflects several changes requested by the ports:

- Increase the total funding for the ships at berth/cargo equipment category.
- Allow more funding per berth for ports facing higher costs because they need to bring in additional power capacity to support the electrification projects.
- Reduce the project life for grid-based shore power from 20 years to 10 years.
- Establish lower operating levels at the smaller ports for the alternative technologies.

California ports and shipping interests continue to lobby for full funding to cover the cost of compliance with ARB's Ships at Berth Rule in response to the worldwide drop in cargo volumes and increased competition from other ports. We recognize both of these factors, but believe that full funding would be inconsistent with the numerous statutory requirements to leverage match funding for all sources, whether ships, trucks, or locomotives.

However, staff's proposal to redirect additional funds to ships at berth/cargo equipment projects would bring the total for the category to \$160 million. The three largest ports provided per berth cost estimates for grid-based shore power to staff in the last month. Based on these estimates, the cost to install new shoreside electrical infrastructure at all of the 54 cargo ship berths is approximately \$325 million. The proposed Program funding would cover up to half of the shoreside cost for every cargo berth that still needs to equipped with shore power. This level of State assistance would be substantially higher than for any other source category. The incentives would provide extra reductions each year, and early reductions for projects completed prior to 2014, to benefit portside communities like Wilmington, West Oakland, and Barrio Logan.

The proposed update to the Guidelines also includes new provisions to deal with the situation where a local agency has an inherent conflict of interest. A seaport may receive a grant as a local agency to administer competitive grants for ships at berth and cargo equipment projects in that trade corridor. The seaport would need to solicit applications for all eligible equipment project options in the funding category, including applications from railroads to upgrade their cargo equipment at railyards in the corridor. The same seaport may also seek a portion of that funding for itself, acting as the equipment owner for a grid-based shore power project. Staff has proposed requirements to ensure fairness and the perception of fairness in project solicitation and competition where a local agency is also a competing equipment owner.

Table 5. Proposed Equipment Project Options for Ships at Berth

E	Eligible Equipment	Upgrade	Maximum Program Funding	Project Life	Other Conditions (partial description)
A	Existing cargo ship berth	Install grid-based shore power (landside infrastructure to berth)	Lower of 50% of the eligible cost or:	10 yrs	50% of ship visits by 2012 (as applicable) 60% of ship visits by 2014 80% of ship visits by 2017
		(1) Full operation begins by January 2012.(2) Full operation begins	(1) \$3.5M/ berth (2) \$3.0M/		90% of ship visits by 2020
		by January 2013. (3) Full operation begins by January 2014.	berth (3) \$2.5M/ berth		
В	Existing cargo ship terminal	Install non-grid-based shore power (zero-emission system or natural gas engine with selective catalytic reduction)	\$200k/MW	5 yrs	Port of Los Angeles and Port of Long Beach: 2,000 hrs/yr (2012-2013) 3,000 hrs/yr (2014 onwards) Other ports: 1,000 hrs/yr (2012-2013) 1,500 hrs/yr (2014 onwards)
С	Existing cargo ship terminal	Install an emissions capture and control system (a.k.a. hood or bonnet) that achieves a minimum control effectiveness of 85% for NOx and 85% for PM	Funding level that provides a cost- effectiveness of 1.0 lbs/ State \$ or greater	10 yrs	Port of Los Angeles and Port of Long Beach: 2,000 hrs/yr (2012-2013) 3,000 hrs/yr (2014-2016) 4,000 hrs/yr (2017-2019) 4,500 hrs/yr (2020 onwards) Other ports: 1,000 hrs/yr (2012-2013) 1,500 hrs/yr (2014-2016) 2,000 hrs/yr (2017-2019) 2,500 hrs/yr (2020 onwards)

23. What is the basis for the commercial harbor craft project options?

Existing tugboats and towboats must upgrade to cleaner technology under ARB's Commercial Harbor Craft Rule. In mid-2010, the Board will consider amendments to expand the regulated harbor craft to include crew and supply vessels.

To date, harbor craft owners have shown little interest in using Program incentives. Owners shared concerns about the lengthy contract commitment and the inability to routinely rotate their boats to ports in other states. The staff proposal would reduce the commitment from 15 to 8 years. The Guidelines provide operational flexibility by allowing funded harbor craft to operate at any of the ports in California's trade corridors. However, if their operations require relocation to out-of-state or out-of-country ports for several months, the vessels are not appropriate for funding with California bond monies.

The proposed update would revise the existing project options to repower the main engines or replace the vessels with cleaner models. Regulated vessels would be eligible for funding for early compliance at about 50 percent of the cost, while not-regulated vessels could receive funding for 80 percent of the cost.

ARB staff is also recommending supplemental funding for hybrid power systems that can be added to existing vessels or built into new vessels to reduce fuel consumption, plus achieve extra reductions in PM, NOx, and greenhouse gas emissions. For example, a hybrid tugboat can use electric batteries for its low power needs, and recharge those batteries when the main engines are running or the vessel is plugged in to shore power. This same technology may be adaptable to crew and supply vessels or pilot vessels. This project option would achieve cost-effective emission reductions with funding at 80 percent of the anticipated cost. A harbor craft owner could combine a grant to upgrade the propulsion engine(s) with a grant to retrofit a hybrid power system.

Table 6. Proposed Equipment Project Options for Commercial Harbor Craft

	Eligible Equipment	Upgrade	Maximum Program Funding	Project Life
A	Regulated in-use: Diesel-powered tugboats, towboats, or crew and supply vessels ¹	 (1) Repower or replace Tier 0 propulsion engine or vessel with new Tier 2 or Tier 3 engine and scrap old engine/vessel² (2) Repower or replace Tier 1 propulsion engine or vessel with new Tier 3 engine and scrap old engine/vessel² 	Lower of 50% of eligible cost or \$140/hp of old engine	8 yrs
В	Not regulated in-use: Diesel-powered work boats or pilot or commercial fishing vessels (fishing with 700 operating hrs/yr)	Repower or replace Tier 0 or Tier 1 propulsion engine or vessel with new Tier 2 or Tier 3 engine and scrap old engine/vessel	Lower of 80% of eligible cost or \$190/hp of old engine	8 yrs
С	Diesel-powered tugboats, crew and supply vessels, or pilot vessels	Retrofit hybrid power system on existing vessel with Tier 2 or Tier 3 propulsion engine(s), or replace existing vessel with a new vessel powered by a hybrid power system that includes Tier 2 or Tier 3 propulsion engine(s) (May be combined with concurrent grant for engine upgrade)	Lower of 80% of eligible cost or \$100/hp of old engine	8 yrs

¹ If the Board does not adopt Rule amendments to require upgrades on existing crew and supply vessels, these vessels would be eligible for funding as described in row B.

² Project needs to achieve at least 2 years of early reductions. This means the upgraded vessel needs to be operational at least 2 years before the applicable compliance date.

24. What is the basis for the cargo handling equipment project options?

Since the Board adopted the Cargo Handling Equipment Rule in December 2005, many of the compliance deadlines have passed or are rapidly approaching. This limits the opportunities for early or extra emission reductions.

The Program Guidelines currently include one project option for cargo equipment. We are proposing to remove this option – funding for an energy storage system on a rubber-tired gantry crane – because it is not viable as an incentive project. The level of minimally cost-effective Program funding (\$10,000) is too low compared to the cost of the equipment (\$160,000-\$320,000) to encourage an equipment owner to make the investment.

The proposed update to the Guidelines would add two new project options for cargo equipment – both focus on incentives to replace a diesel engine or piece of equipment with electric or zero-emission power systems. Both of these options would reduce PM and NOx emissions, as well as fuel consumption and greenhouse gases.

Removing the diesel engine from an existing rubber-tired gantry crane and converting it to run on electric or zero-emission power would provide extra emission reductions. The near-term Rule deadlines make early reductions infeasible. The proposed Program funding would cover roughly 20-30 percent of the total cost, based on the incremental benefit of going from complying technology to more efficient electric or zero-emission power.

Replacing an existing yard truck that has a MY2004-2006 off-road diesel engine with an electric or zero-emission yard truck, at least two years ahead of the regulatory deadline, would achieve both early and extra reductions. The proposed Program funding would cover roughly half the incremental cost of going to electric technology.

Table 7. Proposed Equipment Project Options for Cargo Handling Equipment

Eligible Equipment		Upgrade	Maximum Program Funding	Project Life
Α	Existing diesel rubber- tired gantry crane	Repower diesel engine with electric or zero- emission power system	Lower of 50% of eligible cost or \$100k	15 yrs
В	Existing diesel-powered yard truck with MY2004-2006 off-road engine	Replace with new electric or zero-emission yard truck ¹	Lower of 50% of eligible cost or \$50k	5 yrs

Project needs to achieve at least 2 years of early reductions. For fleets of 1-3 trucks, this means the project needs to be operational 2 years before the applicable compliance date. For larger fleets, this means the Program-funded truck is not eligible to be counted as a compliant truck in the fleet percentage calculations for a 2-year period.

25. How does the Program encourage reductions in greenhouse gas emissions?

With the proposed changes, the Program would encourage greenhouse gas reductions in the following ways:

- The majority of the projects eligible for funding involve replacing old diesel engines
 with more fuel efficient models or alternative power systems that typically cut
 emissions of all pollutants. An equipment owner can currently apply for and receive
 Program funds for cleaner diesel, natural gas, electric, hybrid, or other technology
 that meets PM and NOx performance standards. We are revising the Project
 Benefits Calculators for trucks to recognize additional increments of PM and NOx
 reductions from these technologies, which will increase their competitiveness for
 Program funding.
- ARB has supported the ability of local agencies to supplement the Program funds with federal and local monies to make alternative fuel choices that may have lower greenhouse gas emissions more attractive.
- The proposed updates would encourage greater State funding for projects with significant greenhouse gas reductions. Projects funded under this Program can already rely on co-funding from most other State, federal, local, or private sources. However, if other State funds are used, they must currently be included in the calculation of project cost-effectiveness that impacts the competitive ranking of a project. Since reductions in greenhouse gases are not quantified as part of the benefit side of the cost-effectiveness calculation, State incentives to cut greenhouse gases should similarly be excluded from the cost side of the calculation.

For example, the Assembly Bill 118 Alternative and Renewable Fuel and Vehicle Technology Program, administered by the California Energy Commission, is a potential source of State greenhouse gas funding that could be more readily combined with bond monies for projects involving conversion to alternative fuel or hybrid technologies that achieve substantial reductions in greenhouse gas emissions.

This approach would maintain the Program priority on reducing localized health risk and regional air pollution, while removing a barrier that makes projects using greenhouse gas co-funding from other State sources less competitive.

C. <u>Program Administration</u>

26. How will ARB staff administer the Program given the uncertainty in the bond funding process?

ARB will obligate Program funds for each appropriation according to the deadlines set forth in State law, consistent with the State's fiscal policies for bond-funded programs. This is a two-step process, beginning with the Board's allocation of funds via resolution to specific local or State agency projects, and ending with fully executed grant agreements or interagency agreements once the bond funds become available.

To maintain sound fiscal practices and ensure that projects can reach completion once begun, ARB staff will provide a Start Letter (or multiple letters) for each grant. The Start Letter will authorize the local agency (or State agency for loan and loan guarantee programs) to proceed with project implementation based on a specified level of available funds. For a high dollar value grant, ARB staff may identify partial funding that conforms to the bond cash on deposit. The Start Letter will itemize both the level of project funds and administration funds that are available.

27. How would the proposal improve local agency administration of the Program?

Based upon experience with the first year grants, ARB staff worked with local agencies to develop improvements to the administrative requirements to reduce the workload and help move funds into cleaner equipment sooner.

Local agency project proposals submitted to ARB. The proposed update would significantly streamline the application that local agencies use to seek funding awards from ARB.

Local agency administrative funds. For truck projects, the proposed update would allow the local agency to request and ARB to initially expend up to 75 percent (rather than the current 50 percent) of the local administration funds upon execution of the grant agreement, subject to the availability of bond funds.

Local agency solicitations for projects. The proposed updates would require local agencies to solicit, evaluate, and fund applications for all equipment project options within a funding category. The competitive ranking process determines which projects will be selected for funding.

To expedite projects, the update would allow local agencies to start a second solicitation (with ARB staff approval) before the prior one is closed, if the first solicitation is undersubscribed.

At the local agency's discretion, we are proposing to allow a process for equipment owners to clear any outstanding ARB compliance violations within a set timeframe and be eligible for funding under the solicitation.

The updates would also allow ARB staff to require a standardized equipment project application (including electronic application format) and/or solicitation periods in the future. The goal is to create a single application form for truck incentive programs in the State, regardless of the funding source or the agency administering the program. Such applications and solicitation periods would be developed in close coordination with active local agencies and the California Air Pollution Control Officers Association.

As discussed previously, the proposed changes for reporting truck weight and annual miles traveled would cut the local agency's workload in evaluating truck applications.

Truck lease-to-own programs. The updates would expedite the ARB review and approval process for lease-to-own programs by allowing local agencies the option to use a contract with lessors and require lease riders with Program operating conditions. The approach to override standard lease conditions with a Proposition 1B-specific contract and lease rider would allow the local agency and ARB to avoid having to negotiate changes in each lessor's standard documents. ARB staff consulted with banks and other potential financing companies to ensure this approach is workable. The proposal supports a range of lease-to-own approaches, while retaining important safeguards to protect participant truck owners and the State's financial investment.

Truck pre-inspections. The staff proposal would provide an option for a local agency to delegate truck pre-inspections to truck dealers, retrofit installers, or other entities that are operating under a legal agreement with the local agency to perform the required Program tasks. The local agency must ensure that any such arrangements do not impede the ability of each equipment owner to purchase qualifying equipment from the vendor of his or her choice. The updates would also reduce the number of photographs required to document the identification and condition of each old and upgraded truck.

28. How would State agencies, including ARB, be eligible to implement truck loans or loan guarantees with Program funds?

State law allows any State agency, including ARB, to request and receive Program funding for loan or loan guarantee programs. For truck loan and loan guarantee programs administered by State agencies, the proposed update describes requirements for: funding proposals, interagency agreements, implementation, reporting, and non-performance.

ARB staff would post any State agency proposals, along with the local agency proposals, on the Program website for public review and comment. The Board could then award funding to both eligible local agencies and State agencies administering loan or loan guarantee programs.

ARB staff expects to develop proposals to use Program funds to raise the loan loss reserve (if needed) on the Providing Loan Assistance for California Equipment (PLACE) loan guarantee program to help truck owners qualify for loans. We are also evaluating how established non-profit, community development, or small business assistance programs could effectively offer truck financing with a subsidy from this Program. We are seeking mechanisms to increase the availability of loans for truck retrofits and replacements, as well as lease-to-own programs for truck purchases.

29. What recent changes in State law affect the Program?

The proposed updates to the Program Guidelines incorporate the provisions of 2009 legislation that affects the Program.

Assembly Bill 892 (Furutani, Statutes of 2009) authorizes local agencies to fund backup equipment projects on ARB-approved ranked lists if executed project contracts fall through (rather than funds from failed contracts reverting back to the bond account). If there aren't any backup projects on the ranked list, the local agencies must return the funds to ARB for reallocation according to an established hierarchy. The bill also requires ARB to identify any changes in the scope or dollar amount of grants as part of the annual report on the Program. The staff proposal includes these provisions.

Assembly Bill 672 (Bass, Statutes of 2009) allows local agencies implementing approved Proposition 1B projects to apply to the administering State agency for a "letter of no prejudice" to authorize future reimbursement for funds to be advanced by the local agency at its own risk. Although the legislation is primarily directed at transportation projects funded by Proposition 1B, it also applies to air quality projects. As the administering State agency for this Program, ARB staff is developing the appropriate conditions and process for approval of such letters. We propose that the Board delegate authority to the ARB Executive Officer to establish the conditions and process, and post them on the Program website. Consistent with the legislation, the projects covered by a letter of no prejudice would not gain an advantage or higher priority for funding by ARB as bond monies become available.

APPENDIX A IMPLEMENTING STATUTE

California Codes, Health and Safety Codes Section 39625-39627.5

39625. The Legislature finds and declares as follows:

- (a) In November 2006, the voters approved the Highway Safety, Traffic Reduction, Air Quality and Port Security Bond Act of 2006, also known as Proposition 1B, that, among other things, provided one billion dollars (\$1,000,000,000) to reduce emissions associated with the movement of freight along California's trade corridors.
- (b) Proposition 1B requires these funds to be made available, upon appropriation by the Legislature and subject to the conditions and criteria provided by the Legislature, to the State Air Resources Board in order to reduce the emissions associated with goods movement.
- (c) Proposition 1B further required these funds to be made available for emission reductions not otherwise required by law or regulation. These funds are intended to supplement existing funds used to finance strategies that reduce emissions and public health risk associated with the movement of freight commencing at the state's seaports and land ports of entry and transported through California's trade corridors.
- (d) Tremendous growth in goods movement activity has created a public health crisis in communities located adjacent to ports and along trade corridors. It is the intent of the Legislature that these funds be expended in a manner that reduces the health risk associated with the movement of freight along California's trade corridors.
- (e) It is the intent of the Legislature that the state board maximize the emission reduction benefits, achieve the earliest possible health risk reduction in heavily impacted communities, and provide incentives for the control of emission sources that contribute to increased health risk in the future.
- (f) It is the intent of the Legislature that the state board develop partnerships between federal, state, and private entities involved in goods movement to reduce emissions.
- (g) The purpose of this chapter is to establish standards and procedures for the expenditure of these funds.
- 39625.01. This chapter shall be known, and may be cited, as the Goods Movement Emission Reduction Program.
- 39625.02. (a) As used in this chapter and in Chapter 12.49 (commencing with Section 8879.20) of Division 1 of Title 2 of the Government Code, the following terms have the following meanings:
- (1) "Administrative agency" means the state agency responsible for programming bond funds made available by Chapter 12.49 (commencing with Section 8879.20) of Division 1 of Title 2 of the Government Code, as specified in subdivision (c).
- (2) Unless otherwise specified in this chapter, "project" includes equipment purchase, right-of-way acquisition, and project delivery costs.
- (3) "Recipient agency" means the recipient of bond funds made available by Chapter 12.49 (commencing with Section 8879.20) of Division 1 of Title 2 of the Government Code that is responsible for implementation of an approved project.

- (4) "Fund" shall have the meaning as defined in subdivision (c) of Section 8879.22 of the Government Code.
- (b) Administrative costs, including audit and program oversight costs for the agency administering the program funded pursuant to this chapter, recoverable by bond funds shall not exceed 5 percent of the program's costs.
- (c) The State Air Resources Board is the administrative agency for the goods movement emission reduction program pursuant to paragraph (2) of subdivision (c) of Section 8879.23 of the Government Code.
- (d) The administrative agency shall not approve project fund allocations for a project until the recipient agency provides a project funding plan that demonstrates that the funds are expected to be reasonably available and sufficient to complete the project. The administrative agency may approve funding for usable project segments only if the benefits associated with each individual segment are sufficient to meet the objectives of the program from which the individual segment is funded.
- (e) Guidelines adopted by the administrative agency pursuant to this chapter and Chapter 12.49 (commencing with Section 8879.20) of Division 1 of Title 2 of the Government Code are intended to provide internal guidance for the agency and shall be exempt from the Administrative Procedure Act (Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code), and shall do all of the following:
 - (1) Provide for audit of project expenditures and outcomes.
- (2) Require that the useful life of the project be identified as part of the project nomination process.
- (3) Require that project nominations have project delivery milestones, including, but not limited to, start and completion dates for environmental clearance, land acquisition, design, construction bid award, construction completion, and project closeout, as applicable.
- (f) (1) As a condition for allocation of funds to a specific project under Chapter 12.49 (commencing with Section 8879.20) of Division 1 of Title 2 of the Government Code, the administrative agency shall require the recipient agency to report, on a semiannual basis, on the activities and progress made toward implementation of the project. The administrative agency shall forward the report to the Department of Finance by means approved by the Department of Finance. The purpose of the report is to ensure that the project is being executed in a timely fashion, and is within the scope and budget identified when the decision was made to fund the project. If it is anticipated that project costs will exceed the approved project budget, the recipient agency shall provide a plan to the administrative agency for achieving the benefits of the project by either downscoping the project to remain within budget or by identifying an alternative funding source to meet the cost increase. The administrative agency may either approve the corrective plan or direct the recipient agency to modify its plan.
- (2) Within six months of the project becoming operable, the recipient agency shall provide a report to the administrative agency on the final costs of the project as compared to the approved project budget, the project duration as compared to the original project schedule as of the date of allocation, and performance outcomes derived from the project compared to those described in the original application for

funding. The administrative agency shall forward the report to the Department of Finance by means approved by the Department of Finance.

- 39625.1. As used in this chapter, the following terms have the following meanings:
- (a) "Applicant" means any local public entity involved in the movement of freight through trade corridors of the state or involved in air quality improvements associated with goods movement. For the purposes of administering a loan or loan guarantee program only, an applicant may include any state agency.
- (b) "Emission" or "emissions" means emissions including, but not limited to, diesel particulate matter, oxides of nitrogen, oxides of sulfur, and reactive organic gases.
- (c) "Emission sources" means one of the following categories of sources of air pollution associated with the movement of freight through California's trade corridors: heavy-duty trucks, locomotives, commercial harbor craft, ocean-going vessels related to freight, and cargo-handling equipment.
- (d) "Goods movement facility" means airports, seaports, land ports of entry, freight distribution warehouses and logistic centers, freight rail systems, and highways that have a high volume of truck traffic related to the movement of goods, as determined by the state board.
- (e) "Trade corridors" means any of the following areas: the Los Angeles/Inland Empire region, the Central Valley region, the Bay Area region, and the San Diego/border region.
- 39625.3. Funding pursuant to this chapter may include grants, loans, and loan guarantees.
- 39625.5. (a) (1) Upon appropriation by the Legislature from the funds made available by paragraph (2) of subdivision (c) of Section 8879.23 of the Government Code, the state board shall allocate funds on a competitive basis for projects that are shown to achieve the greatest emission reductions from each emission source identified in subdivision (c) of Section 39625.1, not otherwise required by law or regulation, from activities related to the movement of freight along California's trade corridors, commencing at the state's airports, seaports, and land ports of entry.
- (2) Projects eligible for funding pursuant to paragraph (1) shall include, but are not limited to, the following:
 - (A) The replacement, repower, or retrofit of heavy-duty diesel trucks.
- (B) The replacement, repower, or retrofit of diesel locomotive engines, with priority given to switching locomotive engines, provided that before any project is authorized for a locomotive engine operated and controlled by a railroad company that has entered into a memorandum of understanding or any other agreement with a state or federal agency, a local air quality management district, or a local air pollution control district, including, but not limited to, the ARB/Railroad Statewide Agreement Particulate Emissions Reductions Program at California Rail Yards, dated June 2005, the state board shall determine that the emission reductions that would be achieved by the locomotive engine are not necessary to satisfy any mandated emission reduction requirement under any such agreement.
- (C) The replacement, repower, or retrofit of harbor craft that operates at the state's seaports.

- (D) The provision of on-shore electrical power for ocean freight carriers calling at the state's seaports to reduce the use of auxiliary and main engine ship power.
- (E) Mobile or portable shoreside distributed power generation projects that eliminate the need to use the electricity grid.
- (F) The replacement, repower, or retrofit of cargo handling equipment that operates at the state's seaports and rail yards.
- (G) Electrification infrastructure to reduce engine idling and use of internal combustion auxiliary power systems at truck stops, intermodal facilities, distribution centers, and other places where trucks congregate.
- (b) (1) The state board shall allocate funds in a manner that gives priority to emission reduction projects that achieve the earliest possible reduction of health risk in communities with the highest health risks from goods movement facilities.
- (2) In evaluating which projects to fund, the state board shall at a minimum consider all of the following criteria:
 - (A) The magnitude of the emission reduction.
 - (B) The public health benefits of the emission reduction.
 - (C) The cost-effectiveness and sustainability of the emissions reductions.
 - (D) The severity and magnitude of the emission source's contributions to emissions.
- (E) Regulatory and State Implementation Plan requirements, and the degree of surplus emissions to be reduced.
- (F) The reduction in greenhouse gases, consistent with and supportive of emission reduction goals, consistent with existing law.
 - (G) The extent to which advanced emission reduction technologies are to be used.
 - (H) The degree to which funds are leveraged from other sources.
- (I) The degree to which the project reduces air pollutants or air contaminants in furtherance of achieving state and federal ambient air quality standards and reducing toxic air contaminants.
- (J) The total emission reductions a project would achieve over its lifetime per state dollar invested.
- (K) Whether an emissions reduction is likely to occur in a location where emissions sources in the area expose individuals and population groups to elevated emissions that result in adverse health effects and contribute to cumulative human exposures to pollution.
- (c) The state board shall ensure that state bond funds are supplemented and matched with funds from federal, local, and private sources to the maximum extent feasible.
- 39626. (a) (1) The state board shall develop guidelines by December 31, 2007, consistent with the requirements of this chapter, to implement Section 39625.5, in consultation with stakeholders, including, but not limited to, local air quality management and air pollution control districts, metropolitan planning organizations, port authorities, shipping lines, railroad companies, trucking companies, harbor craft owners, freight distributers, terminal operators, local port community advisory groups, community interest groups, and airports. The guidelines shall, at a minimum, include all of the following:
- (A) An application process for the funds, and any limits on administrative costs for the recipient agency, including an administrative cost limit of up to 5 percent.

- (B) A requirement for a contribution of a specified percentage of funds leveraged from other sources or in-kind contributions toward the project.
 - (C) Project selection criteria.
- (D) The method by which the state board will consider the air basin's status in maintaining and achieving state and federal ambient air quality standards and the public health risk associated with goods movement-related emissions and toxic air contaminants.
- (E) Accountability and auditing requirements to ensure that expenditure of bond proceeds, less administrative costs, meets quantifiable emission reduction objectives in a timely manner, and to ensure that the emission reductions will continue in California for the project lifetime.
- (F) Requirements for agreements between applicants and recipients of funds executed by the state board related to the identification of project implementation milestones and project completion that ensure that if a recipient fails to accomplish project milestones within a specified time period, the state board may modify or terminate the agreement and seek other remedies as it deems necessary.
- (2) Prior to the adoption of the guidelines, the state board shall hold no less than one public workshop in northern California, one public workshop in the Central Valley, and one public workshop in southern California.
- (b) For each fiscal year in which funds are appropriated for the purposes of this chapter, the state board shall issue a notice of funding availability no later than November 30. For the 2007-08 fiscal year, if funds are appropriated for the purposes of this chapter, the state board shall issue a notice of funding upon adoption of the guidelines described in subdivision (a).
- (c) (1) After applications have been submitted and reviewed for consistency with the requirements of this chapter and the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006, the state board shall compile and release to the public a preliminary list of all projects that the state board is considering for funding and provide adequate opportunity for public input and comment.
- (2) The state board shall hold no less than one public workshop in northern California, one public workshop in the Central Valley, and one public workshop in southern California to discuss the preliminary list. This requirement shall not apply to the funds appropriated in the 2007-08 fiscal year.
- (3) After the requirements of paragraphs (1) and (2) are met, the state board shall adopt a final list of projects that will receive funding at a regularly scheduled public hearing.
- (d) Nothing in this chapter authorizes the state board to program funds not appropriated by the Legislature.
- 39626.5. (a) A project shall not be funded pursuant to this chapter unless both of the following requirements are met:
 - (1) The project is sponsored by an applicant.
- (2) The project is consistent with any comprehensive local or regional plans or strategies to reduce emissions from goods movement activities in its jurisdiction.
- (b) Notwithstanding Section 16304.1 of the Government Code, an applicant receiving funds pursuant to this chapter shall have up to two years from the date that the funds are allocated to the applicant pursuant to a grant agreement to award the contract for

implementation of a project, or the funds shall revert to the California Ports Infrastructure, Security, and Air Quality Improvement Account for allocation as provided in paragraph (2) of subdivision (c) of Section 8879.23 of the Government Code upon appropriation by the Legislature. Funds not liquidated within four years of the date of the award of the contract between the applicant and the contractor shall revert to the California Ports Infrastructure, Security, and Air Quality Improvement Account for allocation as provided in paragraph (2) of subdivision (c) of Section 8879.23 of the Government Code upon appropriation by the Legislature. Returned funds or unspent funds from obligated contracts received by the applicant prior to the end of the four-year liquidation period may be awarded by the applicant to fund other equipment projects included on the same competitively ranked list approved by the state board pursuant to the grant agreement, or, if there are no other eligible projects included on that list, shall be returned to the state board for reallocation to an applicant by the state board pursuant to guidelines developed and adopted by the state board through a public process. These guidelines shall give first priority to projects that are both in the same emission source category and in the same trade corridor as the original project, and second priority to projects that are only in the same trade corridor as the original project. All funds awarded by the applicant shall be liquidated within four years of the date of the award of the original contract or shall revert to the California Ports Infrastructure, Security, and Air Quality Improvement Account for allocation provided in paragraph (2) of subdivision (c) of Section 8879.23 of the Government Code upon appropriation by the Legislature.

- (c) Of the amount appropriated in Item 3900-001-6054 of the Budget Act of 2007, not more than twenty-five million dollars (\$25,000,000) shall be available to the state board for the purpose of executing grant agreements directly with ports, railroads, or local air districts for eligible projects to achieve the earliest possible health risk reduction from the emission sources identified in subdivision (c) of Section 39625.1. It is the intent of the Legislature that funds allocated pursuant to this subdivision be distributed pursuant to the guidelines adopted by the state board under Section 39626, and that the state board provide sufficient opportunity for the public to review and comment on any projects proposed to be funded pursuant to this subdivision.
- 39627. The state board may seek reimbursement for program administration costs annually through an appropriation in the Budget Act from funds available pursuant to paragraph (2) of subdivision (c) of Section 8879.23 of the Government Code.
- 39627.5. The state board shall submit an annual report to the Legislature summarizing its activities related to the administration of this chapter with the Governor's proposed budget, on January 10, for the ensuing fiscal year. The summary shall, at a minimum, include a description of projects funded pursuant to this chapter, the amount of funds allocated for each project, the location of each project, the status of each project, and a quantitative description of the emissions reductions achieved through the project or program. The state board shall include in this report a description of any changes to the scope of grant agreements entered into to allocate funds to an applicant or changes to the award amounts described in a grant agreement.

APPENDIX B INTERIM CHANGES TO PROGRAM GUIDELINES VIA EXECUTIVE ORDER

February 2008 - March 2010

In Resolution 08-12 adopting the Program Guidelines on February 28, 2008, the Board delegated to the ARB Executive Officer the authority to adopt limited modifications to those Guidelines.

In Resolution 09-40 on May 28, 2009, the Board found that the ARB Executive Officer needed broader authority to respond to both extraordinary circumstances (such as fiscal crises) and practical issues that arise during Program implementation to ensure that the goals of the Program are achieved. In response, the Board authorized the ARB Executive Officer to adopt changes to the Guidelines that he deems necessary to enable effective implementation of the Program, provided that such changes are consistent with statute and the goals established by the Board. The Resolution further directs ARB staff to identify changes made via Executive Order when the Board considers the next comprehensive update to the Guidelines.

The following is a summary of the changes made via Executive Order since the Board adopted the initial Guidelines in 2008. Final Executive Orders are posted on the Program website at: http://www.arb.ca.gov/gmbond.

EXECUTIVE ORDER 08-011 (June 17, 2008)

 Locomotive Emission Specifications. Make minor modifications to the emission specifications for new switcher locomotives to foster competition between manufacturers.

EXECUTIVE ORDER 08-012 (August 4, 2008)

Early Grant Deferments. Approve requests by the Bay Area Air Quality
Management District and the San Diego Air Pollution Control District to transfer
funds awarded for FY2007-08 early grants for trucks serving ports and rail yards
over to the same agencies' FY2007-08 main grants for that source category.

EXECUTIVE ORDER G-10-007 (pending as of the publication of this Staff Report)

All Source Categories

• **Backup Projects.** Conform to 2009 changes in State law that allow a local agency to fund backup equipment projects on an ARB-approved competitively ranked list if executed equipment contracts fall through to reduce fund reversion.

EXECUTIVE ORDER G-10-007 (continued)

• **Timing to Open Additional Solicitation.** Upon approval by ARB staff, allow a local agency to open an additional solicitation before the earlier solicitation is closed out, provided that there is adequate funding available for all eligible projects within the earlier solicitation.

Trucks

- Timing for Scrappage. Align with the Carl Moyer Program to allow 60 days for a licensed dismantler to destroy the old truck, to accommodate the large volume of trucks being replaced.
- Payment Prior to Scrappage. Allow the local agency to make payment to the equipment owner or dealer upon successful post-inspection of the new equipment and local agency verification that that the old truck has been delivered to the dismantler or is in the custody of an authorized representative.
- Lease-to-Own Programs. Allow ARB staff to approve alternative approaches
 and streamline the review process for truck lease-to-own programs that are
 consistent with the intent of the Guidelines. This includes legal structures that
 provide for compliance with the Program requirements via a contract between the
 local agency and the lessor, together with a lease rider between the lessor and
 each lessee that establishes the local agency's ability to enforce the Program
 requirements on that lessee.
- **Project Life.** Fix an inadvertent change made via Board Resolution 09-40 to the project life for replacement of trucks serving ports and intermodal rail yards. The correct project life is 5 years or 350,000 miles, whichever comes first.

Locomotives

- Eligibility Prior California Operation. Allow an applicant to meet the prior California operation requirement by demonstrating that the company has operated locomotives of similar emissions and horsepower in California's trade corridors for the past two years.
- Class I Railroads Operating in the South Coast Air Basin. Clarify how Class I railroads subject to the 1998 Memorandum of Understanding (MOU) to reduce locomotive emissions in the South Coast Air Basin may compete for Program funding to upgrade locomotives that operate in that region. Any locomotive upgraded with Program funds shall be excluded from the calculation of each railroad's fleet average NOx emissions level under the 1998 MOU for the duration of the project life.

EXECUTIVE ORDER G-10-007 (continued)

• Timing of Equipment Order. Allow railroads to receive grants for locomotives that are pre-ordered as part of the company's national equipment procurement cycle, prior to the Program contract. The executed contract then commits the railroad to "tether" the new purchase in California.

Limited Exceptions to the Program Guidelines

Trucks Serving Ports and Rail Yards - All Agencies

- Retrofit Funding. Authorize local agencies to fund retrofits installed on trucks serving ports and intermodal rail yards between July 1, 2009 and April 30, 2010, for applications submitted in 2008 or 2009.
- **Timing of Equipment Order.** Provide local agencies the option to allow equipment owners to submit purchase orders (at their own risk) for new equipment prior to execution of contract, if conditions defined by ARB staff are met.

Trucks Serving Ports and Rail Yards - South Coast District - Grant G07GMLP3-03 (First Solicitation Only)

- Non owner applicants. Ability for non-owner applicants to compete for funding in second competitively ranked tier following all eligible, on time applications from owners.
- **Application signature.** Ability for registered owner of old truck to sign application after submittal.

Trucks Serving Ports and Rail Yards - Bay Area District - Grant G07GMBP1

- **Reimbursements.** Allow the District to reimburse equipment owners for port truck replacements and retrofits completed after submittal of grant applications in 2008 and 2009, but prior to execution of contracts.
- Extended Retrofit Funding. Authorize the District to fund retrofits installed between April 30, 2010 and June 30, 2010 on less than 300 trucks that are active in the Bay Area's supplemental drayage truck grant process and whose owners had not ordered retrofits by December 31, 2009.

APPENDIX C DECEMBER 2009 STATUS REPORT

Report to the Department of Finance Proposition 1B: Goods Movement Emission Reduction Program STATUS OF PROJECTS AWARDED FY2007-08 FUNDS (as of December 2009)

This status report provides an update on actions through December 2009 to implement the \$1 billion Proposition 1B: Goods Movement Emission Reduction Program (Program) to reduce emissions and health risk from freight operations in California's priority trade corridors. The Air Resources Board (ARB or Board) awards grants to local agencies like air districts and seaports, which then offer incentives in a competitive process to diesel equipment owners to upgrade to cleaner technologies.

Executive Order S-02-07 requires agencies receiving proceeds from bonds approved in November 2006 to provide semi-annual reports to the Department of Finance (DOF) to ensure that agencies execute projects in a timely fashion and the projects achieve their intended purposes. The Government Code also requires agencies administering bond funds to provide an annual report to DOF on the status of the project. All of the documents referenced in this update are posted on the Program website at http://www.arb.ca.gov/gmbond.

Allocations to Local Agencies. In May 2008, the Board allocated the \$250 million in Program funds appropriated under the Fiscal Year (FY) 2007-08 budget to the local agencies shown below. The local agencies signed grant agreements in June 2008 and moved quickly to implement the grants until the December 2008 "stop work" directive from the DOF for bond projects. The FY2009-10 Budget appropriates an additional \$500 million to ARB for this Program. ARB plans to initiate the public process in 2010 to allocate these funds to local agencies by the June 2010 deadline, with project starts contingent on availability of the cash to implement.

In late Spring 2009, ARB received \$111 million in upfront proceeds from the March and April 2009 bond sales. ARB sent letters to local agencies on June 26, 2009 authorizing them to restart a subset of the FY2007-08 grants. These local agencies continued grant implementation, including evaluating project applications and equipment, competitively ranking eligible applications, signing contracts, and funding completed projects. In late 2009, ARB received over \$139 million from the October 2009 bond sales. Once the State Treasurer's Office authorizes ARB to spend these funds based on approved tax compliance certificates, ARB will notify the local agencies in January 2010 to restart work on the remaining suspended grants. ARB has now received all project funds for local agencies to pay to equipment owners, but still needs \$9 million to cover the remainder of administrative costs. To date, ARB has paid out over \$100 million to local agencies, primarily for truck projects. Despite the bond delays, we expect the local agencies to successfully obligate and pay out funds for all grants within the statutory time frames.

Results for FY2007-08 Funds. The local agencies expect to have over 2,400 old trucks scrapped and 3,000 new and retrofitted trucks operational in the first half of 2010, with another 2,100 new and retrofitted trucks ready before the end of 2010. We estimate that for these identified projects they will reduce over 2.3 million pounds of particulate matter (PM) and 40 million pounds of nitrogen oxides (NOx). The reductions shown below reflect data on the specific trucks funded for three early grants that are nearly complete, and default data for the remaining grants that are still in progress. When the truck projects are complete, the emission reductions are likely to be greater because the trucks in the funding queue are substantially older and/or drive higher miles than the default values. We will update the results in subsequent reports.

LOS ANGELES/INLAND EMPIRE TRADE CORRIDOR

Local	Project Description	Grant Emission Reductions (pounds)			Current Project Status	
Agency		Amount	PM	NOx		
	Replace old dirty trucks serving the Ports of Los Angeles and Long Beach with new clean models. (G07GMLP1)	\$6,930,000	77,000	1,583,000	District selected projects for funding, signed contracts with truck owners, and clean trucks began operation prior to the Program suspension. On June 26, 2009, ARB authorized the District to resume any remaining work. District has completed the grant with 132 old trucks scrapped and replaced with new natural gas trucks.	
	Retrofit trucks with soot filters and replace old dirty trucks with new clean models. (G07GMLT1)	\$6,877,500	109,000	1,695,000	District selected projects for funding, signed contracts with truck owners, and some of the new trucks were operational prior to the Program suspension. On June 26, 2009, ARB authorized the District to resume any remaining work. District has completed the grant with 131 old trucks scrapped and replaced with new trucks.	
South Coast Air Quality Management District	Retrofit trucks serving the rail yards with soot filters. (G07GMLP2)	\$2,625,000	15,000	315,000	District was in the process of selecting projects for funding prior to the Program suspension. On June 26, 2009, ARB authorized the District to restart this grant. District is in the final phases of implementation and expects to have 60 new or retrofitted trucks operational by April 2010.	
	Retrofit trucks with soot filters and replace old dirty trucks with new clean models. (G07GMLT2)	\$18,322,500	148,000	3,175,000	District was in the process of selecting projects for funding prior to the Program suspension. ARB expects to authorize restart of this grant in January 2010.	
	Replace old dirty locomotives at rail yards with new clean models. (G07GMLL1)	\$3,090,000	71,000	1,394,000	District was in the process of soliciting locomotive projects prior to the Program suspension. ARB expects to authorize restart of this grant in January 2010.	

LOS ANGELES/INLAND EMPIRE TRADE CORRIDOR (continued)

Local	Project Description	Grant Amount	Emission Reductions (pounds)		Current Project Status	
Agency		Amount	PM	NOx		
Ports of Los Angeles & Long Beach	Replace old dirty trucks serving the Ports of Los Angeles and Long Beach with new clean models.				The Ports selected the first round of projects for funding, signed contracts, and used their own funds to get some new trucks in operation prior to Program suspension. ARB approved the Ports' request to transfer administration of the grant to the South Coast District, with the Port of Long Beach processing the remainder of the trucks from their solicitation. ARB and two ports amended the original grant agreement accordingly.	
Port of Long Beach	(G07GMLP3)	\$3,550,000	20,000	443,000	On September 23, 2009, ARB authorized the Port to restart the grant with up to \$3,550,000 in Program funds for truck replacements. The Port is in the final phases of implementation and expects to have 70 replacement trucks operational by April 2010.	
South Coast Air Quality Management District	(G07GMLP3-03)	\$94,447,500	526,000	11,573,000	On September 29, 2009, ARB executed a grant agreement with the District to administer the remainder of the original funds, adjusted to fund a whole number of trucks, at \$94,447,500. Concurrently, ARB authorized the District to proceed with implementation of \$45,450,000 in project funds. ARB expects to authorize the District to use the remainder of the project funds in January 2010. District expects to have about 1,350 replacement trucks operational by April 2010, with another 450 ready before the end of 2010.	
	Corridor Total	\$135,842,500	966,000	20,178,000		

CENTRAL VALLEY TRADE CORRIDOR

Local	Project Description	Grant Amount	Emission Reductions (pounds)		Current Project Status
Agency			PM	NOx	
San Joaquin Valley Air Pollution Control District	Retrofit trucks with soot filters and replace old dirty trucks with new clean models. (G07GMCT1)	\$5,701,500	359,000	2,030,000	District selected projects for funding and began signing contracts prior to Program suspension. On June 26, 2009, ARB authorized the District to resume the remaining work. District completed 70 projects and expects up to 119 new or retrofitted trucks to be operational in 2010.
	Retrofit trucks with soot filters and replace old dirty trucks with new clean models. (G07GMCT3)	\$40,530,000	287,000	7,421,000	District began the process of selecting projects for funding prior to the Program suspension. On June 26, 2009, ARB authorized the District to restart this grant with up to \$18,850,150 in project funds. ARB expects to authorize the District to use the remainder of the project funds in January 2010. District expects to have nearly 800 new or retrofitted trucks operational in 2010.
Sacramento Metropolitan Air Quality Management District	Replace old dirty trucks with new clean models. (G07GMCT2)	\$840,000	6,000	154,000	District had selected projects for funding prior to Program suspension. District declined to accept project funding from April 2009 bond proceeds until local administrative funding is also available. ARB expects to authorize restart of this grant in January 2010.
	Retrofit trucks with soot filters and replace old dirty trucks with new clean models. (G07GMCT4)	\$4,462,500	41,000	724,000	District was in the process of soliciting project applications prior to Program suspension. District declined to accept project funding from April 2009 bond proceeds until local administrative funding is also available. ARB expects to authorize restart of this grant in January 2010.
	Replace old dirty long- haul locomotives with new clean models. (G07GMCL1)	\$10,300,000	275,000	2,749,000	District was in the process of selecting projects for funding prior to Program suspension. ARB expects to authorize restart of this grant in January 2010.
	Corridor Total		968,000	13,078,000	

BAY AREA TRADE CORRIDOR

Local	Project Description	Grant	Emission Reductions (pounds)		
Agency		Amount	<u>РМ</u>	NOx	Current Project Status
	Install grid-based shoreside electrical power at 3 ship berths at the Port of Oakland so ships can plug in and turn off their engines while docked. (G07GMBS1)	\$2,856,000	16,000	1,604,000	District had signed contract with marine terminal operator and began work prior to Program suspension. On June 26, 2009, ARB authorized the District to restart this grant. The project is proceeding and the contractor will be requesting proposals for construction from bidders. Project is on schedule for completion by mid-2011.
Bay Area Air Quality Management District	Retrofit drayage trucks serving the Port of Oakland or replace them with new clean models. (G07GMBP1)	\$14,121,094	189,000	1,375,000	District was in the process of selecting projects for funding prior to Program suspension. On June 26, 2009, ARB authorized the District to restart this grant with up to \$10,505,804 in project funds, which includes monies redirected from the harbor craft grant. In late December 2009, the District also asked ARB to redirect funds from the locomotive grant to port trucks. ARB expects to authorize the District to use the remainder of the project funds in January 2010. District expects to have 1,170 new or retrofitted trucks operational by April 2010. Note: On December 31, 2009, ARB pledged \$8 million from the FY2009-10 appropriation to fund an additional 1,300 trucks.
	Retrofit trucks with soot filters and replace old dirty trucks with new clean models. (G07GMBT1)	\$17,377,500	131,000	3,098,000	District was in the process of selecting projects for funding prior to Program suspension. ARB expects to authorize restart of this grant in January 2010. District expects to have roughly 400 new or retrofitted trucks operational in 2010.
	Replace old dirty engines in harbor craft with new clean engines. (G07GMBH1)	\$0	0	0	Grant terminated and \$4,263,844 in funds transferred to the existing port truck grant, at the District's request.
	Replace old dirty locomotives at rail yards with new clean models. (G07GMBL1)	\$0	0	0	Grant terminated and \$3,090,000 in funds transferred to the existing port truck grant, at the District's request.
	Corridor Total		336,000	6,077,000	

SAN DIEGO/BORDER TRADE CORRIDOR

Local	Project Description	Grant Amount	Emission Reductions (pounds)		Current Project Status	
Agency			PM	NOx	Gunom Frojest Gunus	
San Diego Air Pollution Control District	Retrofit trucks with soot filters and replace old dirty trucks serving the Port of San Diego with new clean models. (G07GMSP1)	\$0	0	0	District was in the process of selecting projects for funding prior to Program suspension. On June 26, 2009, ARB authorized the District to restart this grant. Due to the withdrawal of all eligible trucks, ARB approved the District's request to transfer \$651,000 from this early grant to its main grant for port trucks (G07GMSP2).	
	Replace old dirty trucks serving the Port of San Diego with new clean models. (G07GMSP2)	\$3,013,500	19,000	617,000	District was soliciting for truck projects prior to Program suspension. On June 26, 2009, ARB authorized the District to restart this grant. District expects to have nearly 60 replacement trucks operational in 2010.	
	Retrofit trucks with soot filters and replace old dirty trucks with new clean models. (G07GMST2)	\$5,302,500	42,000	926,000	District was soliciting for truck projects prior to Program suspension. ARB expects to authorize restart of this grant in January 2010. District expects to have over 100 new and retrofitted trucks operational in 2010.	
Port of San Diego	Install grid-based shore side power at a ship berth at the Port of San Diego so ships can plug in and turn off their engines. (G07GMSS1)	\$2,500,000	pending transfer – new benefits to be determined	pending transfer – new benefits to be determined	The Port was soliciting for shore power projects prior to Program suspension. District's intended shipping partner withdrew and no other viable project exists. ARB will terminate this grant and transfer the funds to an existing truck grant in the same trade corridor.	
Imperial County Air Pollution Control District	Retrofit trucks with soot filters and replace old dirty trucks with new clean models. G07GMST3)	\$3,748,500	29,000	656,000	District was in the process of selecting projects for funding prior to Program suspension. On June 26, 2009, ARB authorized the District to restart this grant. District expects to have nearly 100 new and retrofitted trucks operational in 2010.	
Corridor Total		\$14,564,500	90,000+	2,199,000+		

TOTALS

	Grant Amount	Emission Reductions (pounds)	
	Orani / milouni	PM	NOx
Total Grants to Local Agencies	\$246,595,594	Greater than 2,360,000	Greater than 41,532,000
ARB administration costs	\$3.4 million		
Total FY2007-08 Funds	\$250 million		

